

SYSTEM AND METHOD FOR SECURE OVER-THE-AIR  
ADMINISTRATION OF A WIRELESS MOBILE STATION

**ABSTRACT OF THE DISCLOSURE**

There is disclosed a mobile station for securely communicating with base stations in a wireless network and receiving at least one of a software program, a software correction patch and provisioning data from a server in the wireless network. The mobile station comprises: 1) an RF transceiver capable of receiving wireless messages from the plurality of base stations and converting the received wireless messages to a plurality of Internet protocol (IP) packets; 2) an encryption controller capable of converting the IP packets from an encrypted format to a decrypted format; and 3) a data burst message protocol controller capable of converting the decrypted IP packets to at least one data burst message. Also disclosed is a system for secure over-the-air administration of a wireless mobile station via a base station in a wireless network. The system transmits to the wireless mobile station one or more of a software program, a software correction patch and provisioning data from a server. The system comprises: 1) a data burst message protocol controller for receiving and converting the software program, software correction patch or provisioning data into at least one data burst message; 2) an encryption controller for

converting the at least one data burst message into a plurality of encrypted IP packets; and 3) an RF transceiver for converting the encrypted IP packets into at least one wireless message and transmitting the at least one wireless message to the wireless mobile station.